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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,756	01/30/2001	Mohammed Nafie	TI-31308	9448
23494	7590	02/14/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			DEPPE, BETSY LEE	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/772,756	NAFIE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Betsy L. Deppe	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 December 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 24-27 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 24-27 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed December 6, 2005 have been fully considered but they are not persuasive.
2. In response to applicant's argument on page 5 that Roberts does not even receive the narrow band packets due to the adaptive notch filter 14, it is implicit/inherent that the DSSS station 10 in Figure 1 receives a signal that includes both wideband and narrow band packets via the antenna. If there weren't any narrow band packets being received by DSSS station 10, then the adaptive notch filter 14 would not be necessary.
3. In response to applicant's argument on page 5 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Claim Objections***

4. Claims 24 and 26 are objected to because of the following informalities: in line 10 and 2 of the respective claims, "storing data packet(s)" should be "storing said data packet(s)". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 6,577,670 B1 cited in the Office Action mailed July 9, 2004) in view of Widdowson (WO 99/38270 cited in the Office Action mailed December 7, 2004) and Tsui et al. (US Patent No. 6,061,393)

7. With regard to claims 24, 26 and 27, Figure 1 of Roberts discloses the claimed invention including a wideband radio unit (10) and a narrowband radio unit (20). (See also column 2, line 31 - column 3, line 64 and column 4, lines 43-47) It is implicit/inherent that the received signal is decoded after the narrow band signals/packets have been excluded. However, Roberts does not disclose that the narrow band radio section decodes the one or more narrowband signals/packets and the wideband radio section subtracts the decoded narrowband signals/packets from the received data packet before decoding the received data packet. Furthermore, Roberts does not storing the data packets.

Figures 10 and 11 of Widdowson teaches decoding the narrow band packets and subtracting the decoded Bluetooth packets from the received data packet (40) before decoding the received data packet (21, 18, 19). Since Roberts discloses excluding narrowband signals/packets from the wideband signals/packets (see column 1, lines 20-26), it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of removing narrowband interference taught by Widdowson with the circuit of Roberts in order to avoid the requirement of filters with very sharp cut-offs to attenuate the narrowband signal. (See Widdowson, page 2, lines 11-14)

Tsui et al. teaches storing data before processing. (See column 6, lines 25-28 and 60-62) It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the received data in the device disclosed by Roberts in view of Widdowson in order to ensure that the data is available for subsequent processing. Storing the data also provides greater flexibility in determining when to process the data since the data does not have to be processed in "real-time" (i.e. as it is received).

8. With regard to claim 25, Roberts in view of Widdowson and Tsui et al. disclose the claimed invention including a narrowband unit comprising a Bluetooth system and the one or more narrow band packets comprising Bluetooth packets. (See Roberts, column 1, lines 29-35 and column 2, lines 40-44)

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betsy L. Deppe  
Primary Examiner  
Art Unit 2637